## IN THE CLAIMS

Claim 1 has been amended as follows:

1.　　(Currently Amended)　　A diagnostic device comprising:

an arrangement for generating raw data representing contents of a volume;

a computer connected to said arrangement for calculating gray-scale values,

representing a three-dimensional image of said volume contents, from

said raw data;

an image system connected to said computer for generating image signals,

according to an algorithm employing an algorithmic trapezoidal transfer

function which assigns at least one optical property to the respective

gray-scale values, from said gray-scale values;

a monitor connected to said image system and supplied with said image

signals for displaying said three-dimensional image;

a user-operable input unit connected to said image system; ~~and~~

said image system generating a histogram distribution of said gray-scale

values and displaying user interface graphics on said monitor including

a histogram window in which said histogram distribution is displayed,

said image system in said graphics also displaying ~~an unchanging~~

symbolic trapezoidal transfer function with a plurality of input fields

respectively associated with different points of said symbolic

trapezoidal transfer function, said input unit allowing entries into said

input fields to set the algorithmic trapezoidal transfer function employed

in said algorithm, and said image system inserting a representation of

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the ~~set~~ algorithmic trapezoidal transfer function in said histogram window; and

said image system displays a selection bar in said graphics and representing all of said plurality of algorithmic trapezoidal transfer functions, which are selectable via said selection bar, in said histogram window, and said input unit allowing one of a plurality of algorithmic transfer functions identified by said selection bar to be selected for representation in said graphics, and said image system marking the set algorithmic trapezoidal transfer function at said points of said symbolic trapezoidal transfer function.

Claim 2, 3 and 4 have been cancelled.

2.      (Cancelled)

3.      (Cancelled)

4.      (Cancelled)

5.      (Original)      A diagnostic device as claimed in claim 1 wherein said symbolic trapezoidal transfer function has corner points, and wherein said input fields are respectively associated with said corner points and wherein said input unit allows, by respective entries in said input fields, selection of said corner points and thus selection of their respective gray-scale range.

6.      (Original)      A diagnostic device as claimed in claim 1 wherein said at least one optical property is selected from the group consisting of brightness, color and transparency, and wherein said image system displays an input field in said graphics allowing said at least one optical property to be varied via said input unit.

7.      (Original)    A diagnostic device as claimed in claim 1 wherein said histogram distribution displayed in said histogram window has a gray-scale value range, and wherein said image system displays a scroll bar in said graphics allowing, via said input unit, variation of said gray-scale range.

8.      (Original)    A diagnostic device as claimed in claim 1 wherein said image system generates said image signals according to a volume rendering algorithm.

9.      (Previously Presented)    A diagnostic device as claimed in claim 1 wherein said image system comprises a memory in which a plurality of different algorithmic trapezoidal transfer functions are stored, and wherein said image system displays an input field in said graphics allowing selection, via said input unit, of one of the algorithmic trapezoidal transfer functions stored in said memory for use as said algorithmic trapezoidal transfer function employed in said algorithm.